What is claimed is:

1. In a cam torque actuated (CTA) system having a crank shaft coupled to at least one cam shaft, at least one timing gear associated with the crank shaft or a cam shaft, the timing gear comprising:

at least two groups of toothlike projections including a first group having a first distance to the center of the wheel, and a second group having a second distance to the center of the wheel, the first distance being different from the second distance;

whereby torsional energy for torque actuated purposes is increased for the CTA system.

2. The timing gear of claim 1, wherein the at least two groups further comprising a third group having a third unique distance to the center of the wheel.

3. The timing gear of claim 1, wherein the timing gear is concentrically coupled to the at least one cam shaft.

4. The timing gear of claim 1, wherein the timing gear is concentrically coupled to a crank shaft.

5. The timing gear of claim 1, wherein the timing gear is mounted upon a phaser.

6. The timing gear of claim 1, wherein the timing gear is engaging an engine timing chain, said timing gear having various toothlike projections and grooves arranged on a wheel rim of a wheel for engaging the links of a timing chain.

7. The timing gear of claim 1, wherein the timing gear is engaging an engine timing belt.

8. In a cam torque actuated (CTA) system having a crank shaft coupled to at least one cam shaft, the system comprising:

a resonator positioned upon the at least one cam shaft, the resonator including at least one mass and at least one elastic element;

whereby torsional oscillation of the at least one cam shaft at a predetermined engine speed range is increased.

9. The system of claim 8, wherein the at least one mass comprising an annular metal member.

10. The system of claim 8, wherein the at least one elastic element comprising annular rubber member attached onto the at least one cam shaft.

11. The system of claim 8, wherein the at least one elastic element comprising at least one spring having a first end attached to the at least one cam shaft and a second end connected to the at least one mass.